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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,856	09/19/2000	Kazuhiro Hashimoto	197372US2	5426
22850	7590	03/25/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HUYNH, KIM T	
			ART UNIT	PAPER NUMBER
			2112	11

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/664,856

Applicant(s)

HASHIMOTO, KAZUHIRO

Examiner

Kim T. Huynh

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Dutton et al. (US Patent 6,061,756)

As per claims 1, 8 and 15, 21-23, Dutton discloses a data transfer control circuit for carrying out data transfer by using a plurality of bus masters, comprising:

- A data bus (130) connected to a peripheral apparatus (142-146), said data bus having a plurality of unit data buses (channels) each of which transfers concurrently; (col.5, 24-34)
- A plurality of bus masters configured to send a request signal requesting a use of each of said unit data buses and to use said unit data buses requested when a request by means of said request signal is granted; and (col.9, lines 19-25)
- A bus controller (222) configured to spit-control said unit data buses for said plurality of bus masters by giving a grant signal which grants the use

of each of said unit data buses in accordance with said request signal
wherein (col.10, lines 26-58)

- The request signal has a data field comprising a plurality of bits, each of said plurality of bits corresponding to a respective one of said unit data buses. (col.10, lines 26-39)

As per claims 2, 9 and 16, Dutton discloses wherein said bus controller sends the grant signal to said bus masters a bus release requesting signal requesting release of said unit data buses. (col.10, lines 44-58)

As per claims 3, 10 and 17, Dutton discloses wherein said bus controller includes a monitor circuit for monitoring availability of said unit data buses. (col.8, 53-63)

As per claims 4, 11 and 18, Dutton discloses wherein said bus controller judges whether said unit data buses of said data bus are available based on a monitoring result of said monitor circuit, and when said unit data buses are available, said bus controller provides the grant signal of the use of said unit data buses to said bus master. (col.10, lines 26-58)

As per claims 5, 2 and 19, Dutton discloses wherein said bus controller sends a state signal indicating the availability of said unit data buses to each of said bus masters based on a monitoring result of said monitor circuit. (col.10, lines 44-58)

As per claims 6, 13 and 20, Dutton discloses wherein said request signal includes information specifying each unit data bus in said data bus. (col.5, lines 24-43)

As per claims 7 and 14, Dutton discloses wherein said request signal includes information specifying the number of the unit data buses in said data bus. (col.8, lines 53-63)

Response to Amendment

3. Applicant's amendment filed on 1/29/04 have been fully considered but are moot in view of the new ground(s) of rejection.

a. In response to applicant's argument that the combination references of Kenny and Kato do not teach or suggest a data bus connected to a peripheral apparatus, the data bus comprising a plurality of unit data buses, each of which transfers data concurrently. As Dutton notes at col.5, lines 24-34, the multimedia bus 130 is connected to multimedia devices 142-146(peripheral) for data transferring via available channels (unit data buses). The byte slicing logic 176 in a first multimedia devices 142 is operable to assign a data stream to a subset of the available data channels on the bus 130 while allowing the allowing the byte slicing logic 176 in a second multimedia device 144 to transfer another data stream concurrently over another subset of the available data channels on the bus 130. Thus, the prior art teaches the invention as claimed and the amended claims do not distinguish over the prior art as applied.

Conclusion

4. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM- 6:30PM.*

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The

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fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.

Kim Huynh

March 20, 2004



Khanh Dang
Primary Examiner